

Purchase Order Receipt Listing

Friday, November 27, 2015 11:31:24 AM

All amounts are calculated in domestic currency.

All Vendors PO ID PO30515 All Receipt Dates All Line Item Types
All Item ID/GL/WOs All Rec. Employees All Currencies
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Rev Date/ Rev Emp	Rev Qty (PO U/M)	Cost Per Unit/ Rev Value	Inspected Qty/ Rejected Qty (PO U/M)	MIRB Qty/ MIRB Reject Qty	Book Amt
Vendor ID/Vendor Name VU-TW-M001 TW-Metals											
PO30515	1	No	M304TR0.750W.049 f		12/2/2015 60.0000	11/27/2015 DCUSER	60.0000	\$2.10	0.0000	0	\$126.00
USD			304 RD Tube .750 x .049W					\$126.00	0.0000	0	
			m133700								
	2	No	M6061T6T0.375W.0 f		12/2/2015 48.0000	11/27/2015 DCUSER	48.0000	\$2.15	0.0000	0	\$103.20
			58								
			6061-T6 RD Tube .375 x.058W					\$103.20	0.0000	0	
			m133700								
	3	No	M6061T6T0.625W.0 f		12/2/2015 24.0000	11/27/2015 DCUSER	24.0000	\$3.15	0.0000	0	\$75.60
			65								
			6061-T6 RD Tube .625 x.065W					\$75.60	0.0000	0	
			m133700								
	5	No	M6061T6T1.000W.06 f		12/2/2015 108.0000	11/27/2015 DCUSER	108.0000	\$2.96	0.0000	0	\$319.19
			5								
			6061T6 RD TUBE 1.00 x .065W					\$319.19	0.0000	0	
			m133700								
	6	No	M6061T6T1.250W.1 f		12/2/2015 108.0000	11/27/2015 DCUSER	108.0000	\$5.24	0.0000	0	\$566.35
			25								
			ALUM. RD TUBING f 1.250 x.125W					\$566.35	0.0000	0	
			m133700								
	7	No	M6061T6T1.500W.1 f		12/2/2015 36.0000	11/27/2015 DCUSER	36.0000	\$6.70	0.0000	0	\$241.20
			25								
			6061T6 RD TUBE 1.50 X .125W					\$241.20	0.0000	0	
			m133700								
	8	No	M6061T6T1.750W.0 f		12/2/2015 108.0000	11/27/2015 DCUSER	108.0000	\$6.75	0.0000	0	\$729.00
			65								
			6061T6 RDTUBE 1.750 X 0.65W					\$729.00	0.0000	0	
			m133700								

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recy Date/ Recy Emp	Recy Qty (PO U/M)	Cost Per Unit/ Recy Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor ID \ Vendor Name PO30515	9		VI-TWM1001 TW Metals M6061T6TS1.000W. f 120		12/2/2015 11/27/2015		168.0000	\$2.00	0.0000	0	\$336.00
USD	No		6061T6 SQ TUBE f 1.00 x 1.00 X .120w m133700		168.0000 DCUSER			\$336.00	0.0000	0	
	10		71401-45		12/2/2015 11/27/2015		1.0000	\$0.00	0.0000	0	\$0.00
	No		PROCUREMENT QUALITY CLAUSES m133700		1.0000 DCUSER			\$0.00	0.0000	0	
Total Received Quantity: Total Qty to Inspect (PO U/M): Total Reject Quantity: Total Receipt Value: Total Balance Due Quantity:											
											661.0000
											0.0000
											0.0000
											\$2,496.55
											0.0000



O'Neal High-Performance Metals Group



**Packing
Slip**

ORDER NO.: 80747169

FROM: CHIC

PAGE 5

CUST NUMBER: 1203820 NET WGT:

262.270 REQ.DATE: 11/25/15 CONFIRMED

SOLD TO:

SHIP TO:

DART AEROSPACE LTD

DART AEROSPACE LTD

1270 ABERDEEN ST

1270 ABERDEEN ST

HAWKESBURY ON

HAWKESBURY ON

CANADA

ONTARIO CANADA

CN K6A 1K7

CN K6A 1K7

SALESPERSON:

DONNA SMALLEY

TERMS:

NET 30 DAYS

F.O.B.:

SHIPPING POINT

SHIP BY:

11/23/15

CUST ORD NO.:

PO30515

235 TUBEWAY

CAROL STREAM

IL 60188

VIA:

COMMON CARRIER

FREIGHT:

PREPAID

RELEASE NO.:

RECEIVING PHONE:

"TW Metals MSDS data is available on our web site at www.twmetals.com. MSDS data can be found under the Technical Resources Tab, Product Statistics & Data and the TW Metals MSDS's heading. If you do not have web site access you may telephone 610-458-1300 and we will mail or fax a copy of our current MSDS data to your location."

"CERTIFICATE OF CONFORMANCE"

"TW Metals certifies that the material supplied on this purchase order and contained in the heat/lot number referenced above has been manufactured, inspected, and tested in accordance with the material specification. These records are on file at TW Metals. Packaging material for shipments to Europe and China consists of manufactured wood products and complies with the European emergency measures for coniferous non-manufactured wood packing material"

Authorized Test Report Clerk

Date: 11/23/15

These commodities have been exported from the United States in accordance with the U.S. export control laws, export administrations regulations. Diversion contrary to U.S. law prohibited.

SPS-11-27

SPS-11-27

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL REVIEW.
<http://www.twmetals.com/invoice-terms.html>



O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 80747169

FROM: CHIC

PAGE 1

CUST NUMBER: 1203820 NET WGT: 262.270 REQ.DATE: 11/25/15 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 11/23/15
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: PO30515 RELEASE NO.:
RECEIVING PHONE:

LINE ITEM DESCRIPTION WIDTH LENGTH
0001 36860 SMLS OD 304/L A269 3/4 OD X .049 WA 20' CL

ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
60.000 FT	60.000 FT	60.000 FT	22.003	3

PART#: M304TR0.750W.049

** 1 TEST REPORTS REQUIRED **
** 1 CERTS REQUIRED **

ECCN: 2B999.g Export License: NLR Expiration Date: 0/00/00
PO:49332090 HT:150319T07 PC: 3 CUSTOMER QTY: UOM
MLT: MFG:CHINA SLB/CL:US-2325

0002 41952 D6061-T6 3/8 OD X .058 WA 12 FT ML

ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
48.000 FT	48.000 FT	48.000 FT	3.254	4

PART#: M6061T6T0.375W.058

** 1 TEST REPORTS REQUIRED **
** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49334530 HT:34351589 PC: 4 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:303393

0003 42558 D6061-T6 5/8 OD X .065 WA 12 FT ML

ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
24.000 FT	24.000 FT	24.000 FT	3.214	2

PART#: M6061T6T0.625W.065

** 1 TEST REPORTS REQUIRED **
** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00

SP15-11-27

THANK YOU FOR THIS ORDER

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O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 80747169

FROM: CHIC

PAGE 2

CUST NUMBER: 1203820 NET WGT: 262.270 REQ.DATE: 11/25/15 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA ONTARIO CANADA
CN K6A 1K7 CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 11/23/15
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: PO30515 RELEASE NO.:
RECEIVING PHONE:

LINE ITEM DESCRIPTION WIDTH LENGTH UOM
PO:49334285 HT:F001942980002 PC: 2 CUSTOMER QTY:
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:218488

0004 43284 D6061-T6 1 OD X .065 WA 12 FT ML
ORD QTY INVOICE QTY SHIPPED QTY WT PCS
108.000 FT 108.000 FT 108.000 FT 24.300 9

PART#: M6061T6T1.000W065

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49331535 HT:F001883000003 PC: 7 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:218168
PO:49332930 HT:F001901760002 PC: 2 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:218321

0005 43737 D6061-T6 1-1/4 OD X .125 WA 12 FT ML
ORD QTY INVOICE QTY SHIPPED QTY WT PCS
108.000 FT 108.000 FT 108.000 FT 56.104 9

PART#: M6061T6T1.250W.125

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49324085 HT:F001782400001 PC: 2 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:675314
PO:49328653 HT:F001863310001 PC: 3 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:217874
PO:49328653 HT:F001863310002 PC: 4 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:217874

8015-11-27

THANK YOU FOR THIS ORDER

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PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL
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O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 80747169

FROM: CHIC

PAGE 3

CUST NUMBER: 1203820 NET WGT: 262.270 REQ.DATE: 11/25/15 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 11/23/15
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: PO30515 RELEASE NO.:
RECEIVING PHONE:

LINE	ITEM DESCRIPTION	WIDTH	LENGTH	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
0006 44129	D6061-T6 1-1/2 OD X .125 WA		12 FT ML	36.000 FT	36.000 FT	36.000 FT	22.857	3

PART#: M6061T6T1.500W.125

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49339301 HT:22558086 PC: 3 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:1000542017

0007 44328	D6061-T6 1-3/4 OD X .065 WA		12 FT ML	108.000 FT	108.000 FT	108.000 FT	43.688	9
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PART#: M6061T6T1.750W.065

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49336978 HT:22269697 PC: 9 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:1000546276

0008 45963	E6061-T6 SQ-SC TUBE 1 SQ X .125 WA		21'-1" FT	168.000 FT	168.667 FT	168.667 FT	86.850	8
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PART#: M6061T6TS1.000W.120

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00

80/211-27

THANK YOU FOR THIS ORDER

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O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 80747169

FROM: CHIC

PAGE 4

CUST NUMBER: 1203820 NET WGT: 262.270 REQ.DATE: 11/25/15 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 11/23/15
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: PO30515 RELEASE NO.:
RECEIVING PHONE:

LINE	ITEM DESCRIPTION	WIDTH	LENGTH	
PO:49336368 HT:201513022	PC: 3	CUSTOMER QTY:		UOM
MLT:BAHREIN MFG:UNITED STATES		SLB/CL:237137		
PO:49336938 HT:201516564	PC: 5	CUSTOMER QTY:		UOM
MLT:UNITED STATES MFG:UNITED STATES		SLB/CL:238291		

BROKERS KUEHNE AND NAGEL LTD

AREA	TYPE OF PKG	PKGS	GRS WEIGHT	WIDTH	LENGTH	HGHT
YRC	REDDICRATE	1.000	141.000	5.0000	258.0000	6
YRC	BUNDLE	1.000	218.000	9.0000	150.0000	13
		2.000	359.000			

BY: CL
RT 000-

UNLOAD TYPE: NONE SPECIFIED

2015-11-27

DATE SHIPPED _____

1

DATE FILLED _____

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE
PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL
REVIEW.
<http://www.twmetals.com/invoice-terms.html>

KAISER ALUMINUM FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: M49324085-1		CUSTOMER PART NUMBER: 43737		PRODUCT DESCRIPTION: Seamless Tube/Pipe	
KAISER ORDER NUMBER: 675314	LINE ITEM: 001	SHIP DATE: 12/10/2014	KAISER LOT NUMBER: F00178240	ALLOY: 6061	TEMPER: T6
WEIGHT SHIPPED: 1190.000 LB	QUANTITY: 191.000 PCS	B/L NUMBER: 610565	DIA/DIA F/THKNS:	WIDTH:	LENGTH: 12.000 FT
SHIP TO: TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA			SOLD TO: TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
F00178240	0001	1	46.6	43.1	15.5	N/A	N/A	N/A
F00178240	0002	1	46.5	43.8	18.5	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D73938	.60	.22	.24	.05	.98	.05	.03	.02	.00	.00	.00	.01	.02

Applicable Requirements:

Description: OD: 1.250"; Wall: 0.125"; Round @
AMS-4082B AMS-WW-T-700/6B ASTM B210-12 WW-T-700/6F
WE TAKE EXCEPTION TO PARA. 5.2.1, Per AMS-4082P, WAS NOT OILED.
This Product Complies to FAR BAA, DFARS BAA, FAR TAA
COMPLIES TO DIN EN 10204 JAN 2005
No Weld Repair. Mercury Free.

Miscellaneous Notes

MANUFACTURED IN USA (CHANDLER, AZ) MELTED IN USA
MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA
(DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5
TRADE AGREEMENTS).

TW METALS	
TEST	REPORT
DEC 17 2014	
ACCEPTED BY	

Plant Serial: 00157631
Kaiser Order Number: 675314
Line Item: 001

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

Best in Class

CERTIFIED TEST REPORT

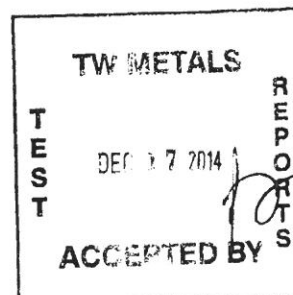
<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Aimee L. Macnowski, Quality & Technology Manager

Aimee L. Macnowski



KAISER ALUMINUM FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CUSTOMER PO NUMBER: M49328653-1		CUSTOMER PART NUMBER: 43737		PRODUCT DESCRIPTION: Seamless Tube/Pipe	
KAISER ORDER NUMBER: 217874	LINE ITEM: 001	SHIP DATE: 04/20/2015	KAISER LOT NUMBER: F00186331	ALLOY: 6061	TEMPER: T6
WEIGHT SHIPPED: 1197.000 LB	QUANTITY: 192.000 PCS	B/L NUMBER: 218524	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO: TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA			SOLD TO: TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA		

DAS
14 15/12/02
039

Actual Physical Properties

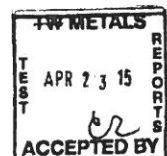
REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON% IACS	BEND
F00186331	0001	1	45.6	43.6	16.5	N/A	N/A	N/A
F00186331	0002	1	45.3	41.6	15.0	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D39624	.59	.28	.20	.04	1.00	.07	.02	.02	.00	.00	.00	.01	.02

Applicable Requirements:

Description: OD: 1.2500"; Wall: 0.1250"; Round @
AMS-4082P AMS-WW-T-700/6F ASTM B210-F2 WW-T-700/6F
WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS-4082P, WAS NOT OILED.
This Product Complies to FAR BAA, DFARS BAA, FAR TAA
COMPLIES TO DIN EN 10204 JAN 2005
No Weld Repair. Mercury Free.



Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA (DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5 TRADE AGREEMENTS).

**KAISER
ALUMINUM
FABRICATED PRODUCTS**

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

*Best in
Class*

CERTIFIED TEST REPORT

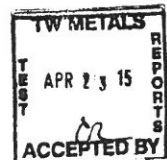
<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Linda Adkins, Quality Manager

Linda Adkins



KAISER ALUMINUM FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CUSTOMER PO NUMBER: M49328653-1		CUSTOMER PART NUMBER: 43737		PRODUCT DESCRIPTION: Seamless Tube/Pipe	
KAISER ORDER NUMBER: 217874	LINE ITEM: 001	SHIP DATE: 04/20/2015	KAISER LOT NUMBER: F00186331	ALLOY: 6061	TEMPER: T6
WEIGHT SHIPPED: 1197.000 LB	QUANTITY: 192.000 PCS	B/L NUMBER: 218524	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 12.000 FT
SHIP TO: TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA			SOLD TO: TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA		

DAS
14
9-89 *15/12/02*

Actual Physical Properties

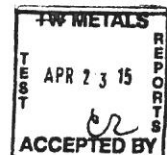
REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00186331	0001	1	45.6	43.6	16.5	N/A	N/A	N/A
F00186331	0002	1	45.3	41.6	15.0	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D39624	.59	.28	.20	.04	1.00	.07	.02	.02	.00	.00	.00	.01	.02

Applicable Requirements:

Description: OD: 1.2500", Wall: 0.1250", Round @
AMS-4082P AMS-WW-T-700/6B ASTM B210-12 WW-T-700/6F
WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS-4082P, WAS NOT OILED.
This Product Complies to FAR BAA, DFARS BAA, FAR TAA
COMPLIES TO DIN EN 10204 JAN 2005
No Weld Repair. Mercury Free.



Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA
(DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5
TRADE AGREEMENTS).

KAISER ALUMINUM FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

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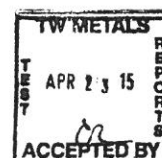
CERTIFIED TEST REPORT
<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Linda Adkins, Quality Manager

Linda Adkins



KAISER ALUMINUM FABRICATED PRODUCTS

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KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CUSTOMER PO NUMBER: M49331535-1		CUSTOMER PART NUMBER: 43284		PRODUCT DESCRIPTION: Seamless Tube/Pipe	
KAISER ORDER NUMBER: 218168	LINE ITEM: 001	SHIP DATE: 05/11/2015	KAISER LOT NUMBER: F00188300	ALLOY: 6061	TEMPER: T6
WEIGHT SHIPPED: 1376.000 LB	QUANTITY: 511.000 PCS	B/L NUMBER: 218690	DIA/DIAF/THKNS:	WIDTH:	LENGTH: 12.000 FT
SHIP TO: TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA			SOLD TO: TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00188300	0001	1	46.1	39.1	19.5			
F00188300	0002	1	46.1	41.1	19.0	N/A	N/A	N/A
F00188300	0003	1	45.4	41.2	17.0	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

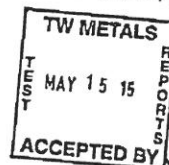
LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D74499	.60	.31	.21	.05	.98	.07	.03	.02	.00	.00	.00	.01	.02

Applicable Requirements:

Description: OD: 1.0000"; Wall: 0.0650"; Round @
AMS-4082P AMS-WW-T-700/6B ASTM B210-12 WW-T-700/6F
WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS-4082P, WAS NOT OILED.
This Product Complies to FAR BAA, DFARS BAA, FAR TAA
COMPLIES TO DIN EN 10204 JAN 2005
No Weld Repair. Mercury Free.

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA
(DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5
TRADE AGREEMENTS).



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**KAISER
ALUMINUM**
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

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CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

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Linda Adkins, Quality Manager

Linda Adkins



KAISER ALUMINUM FABRICATED PRODUCTS

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CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CUSTOMER PO NUMBER: M49332930-1		CUSTOMER PART NUMBER: 43284		PRODUCT DESCRIPTION: Seamless Tube/Pipe	
KAISER ORDER NUMBER: 218321	LINE ITEM: 001	SHIP DATE: 06/06/2015	KAISER LOT NUMBER: F00190176	ALLOY: 6061	TEMPER: T6
WEIGHT SHIPPED: 1793.000 LB	QUANTITY: 665.000 PCS	B/L NUMBER: 218933	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 12.000 FT
SHIP TO: TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA			SOLD TO: TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA		

DAS
14
9-89
15/12/02

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00190176	0001	1	44.7	42.8	15.5	N/A	N/A	N/A
F00190176	0002	1	44.4	42.3	15.0	N/A	N/A	N/A
F00190176	0003	1	45.5	43.7	15.5	N/A	N/A	N/A
F00190176	0004	1	44.9	42.7	15.5	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

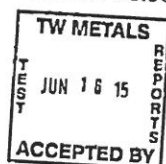
LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D74575	.60	.32	.21	.04	.96	.10	.05	.03	.00	.00	.00	.01	.02

Applicable Requirements:

Description: OD: 1.0000", Wall: 0.0650", Round @
AMS-4082P AMS-WW-T-700/6B ASTM B210-12 WW-T-700/6F
WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS-4082P, WAS NOT OILED.
This Product Complies to FAR BAA, DFARS BAA, FAR TAA
COMPLIES TO DIN EN 10204 JAN 2005
No Weld Repair. Mercury Free.

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA
(DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5
TRADE AGREEMENTS).



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KAISER ALUMINUM FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

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CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

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Linda Adkins, Quality Manager

Linda Adkins





Service Center Metals

5850 Quality Way
Prince George, VA 23875

Can Do.

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

BILL TO TW METALS-Exton, PA		MANIFEST NUMBER 265508		DATE OF SHIPMENT 7/15/2015	
SHIP TO TW METALS-Carol Stream, IL		CUSTOMER PO M49336368		ALLOY/TEMPER 6061-T6	
Quantity Certified 1,509 lbs 139 pcs		CUSTOMER PART NUMBER 45963		SALESPERSON Ellis Williams	

OUR ORDER NUMBER 237137	ITEM 1
CERTIFICATION ASTM-B221-14 SPOT STENCILLED	
SPECIFICATION AMS-QQA-2008 - 1997	

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the SCM extrusions are manufactured in the USA.

Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
	8 201513022	7/11/15	min 42.00 max 48.50	min 37.60 max 45.30	min 11.12 max 11.78

DAS
14
9-09
15/12/02

Chemical Composition for Aluminum Alloy 6061

<u>Cast #</u>	<u>Lot No.</u>	<u>Alloy</u>	<u>Si</u>	<u>Fe</u>	<u>Cu</u>	<u>Mn</u>	<u>Mg</u>	<u>Cr</u>	<u>Zn</u>	<u>Ti</u>	<u>AL</u>	<u>Others</u>	<u>Melt Source:</u>
N4538811	201513022	6061	0.62	0.14	0.18	0.02	0.81	0.06	<0.01	0.01	98.15	0.05	0.15
SCM is ISO 9001-2008 certified													
Bahrain (Alba)													



1. FAR BAA	<input type="checkbox"/> Complies	<input checked="" type="checkbox"/> Cannot certify compliance
2. DFARS BAA	<input type="checkbox"/> Complies	<input checked="" type="checkbox"/> Cannot certify compliance
3. FAR TAA	<input type="checkbox"/> Complies	<input checked="" type="checkbox"/> Cannot certify compliance

Calvin J. Wiggins, Director of Quality & Technical Services

Print Date: 7/15/2015

KAISER ALUMINUM FABRICATED PRODUCTS

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CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CUSTOMER PO NUMBER: M49334285-1		CUSTOMER PART NUMBER: 42558		PRODUCT DESCRIPTION: Seamless Tube/Pipe	
KAISER ORDER NUMBER: 218488	LINE ITEM: 001	SHIP DATE: 07/31/2015	KAISER LOT NUMBER: F00194298	ALLOY: 6061	TEMPER: T6
WEIGHT SHIPPED: 501.000 LB	QUANTITY: 311.000 PCS	B/L NUMBER: 219444	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 12.000 FT
SHIP TO: TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA			SOLD TO: TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA		

DAS
14
9-89 *5/12/02*

Actual Physical Properties

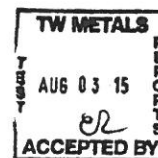
REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00194298	0001	1	48.2	44.9	17.0	N/A	N/A	N/A
F00194298	0002	1	48.1	43.5	17.0	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D82011	.58	.33	.22	.03	.99	.09	.09	.04	.00	.00	.00	.01	.02

Applicable Requirements:

Description: OD: 0.6250"; Wall: 0.0650" Round @
AMS-4082P AMS-WW-T-700/6B ASTM B210-12 WW-T-700/6F
WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS-4082P, WAS NOT OILED.
This Product Complies to FAR BAA, DFARS BAA, FAR TAA
COMPLIES TO DIN EN 10204 JAN 2005
No Weld Repair. Mercury Free.



Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA
(DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5
TRADE AGREEMENTS).

Plant Serial: 00020018
Kaiser Order Number: 218488
Line Item: 001

**KAISER
ALUMINUM
FABRICATED PRODUCTS**

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CERTIFICATION

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Nathaniel Stevens, Quality Manager

Nathaniel Stevens



C



A COMPANY OF MUELLER INDUSTRIES

PRECISION TUBE CO.
287 WISSAHICKON AVE.
NORTH WALES PA 19454

Control No: 169990

CERTIFIED TEST REPORT

CUSTOMER PURCHASE ORDER NO. 49334530 LINE 001	CUST. ORD. NO. 303393	PRECISION TUBE P/N 24A037500580006
SOLD: TW METALS TO 235 TUBEWAY CAROL STREAM, IL 60188 UNITED STATES		SHIP: TW METALS TO 235 TUBEWAY CAROL STREAM, IL 60188 UNITED STATES

QUANTITY ORD.	DESCRIPTION	QTY. SHIPPED	DATE SHIPPED
4008 FT	METAL - 6061 ALUM TEMPER - T6 SPEC - AMS 4082P LENGTH - 12 FT LGTH TOL +.1250 IN -.0000 IN SHAPE - ROUND FINISH - STRAIGHT EXACT LENGTHS OD .3750 +.0030 -.0030 ID WALL .0580 +.0040 -.0040	4080 FT DAS 14 9-89 15/12/02	08/05/15 <div style="border: 1px solid black; padding: 2px; display: inline-block;">TW METALS TEST AUG 12 15 ACCEPTED BY</div>

MECHANICAL PROPERTIES					
SAMPLE #	TENSILE STRENGTH (P.S.I.)	YIELD STRENGTH (P.S.I.)	ELONGATION IN 2 INCHES (%)	ROCKWELL HARDNESS	AVERAGE GRAIN SIZE (MM.)
1	45,814	41,728	16		

DESTRUCTIVE TESTS

Comments: FAR BAA COMPLIES, DFARS BAA COMPLIES, FAR TAA COMPLIES

NON-DESTRUCTIVE TESTS

EDDY CURRENT: PASS

CHEMICAL COMPOSITION

ALLOY: 6061	HEAT:	TRACEABILITY #: 34351589							
RAW MATL VENDOR: PT50821 - Kaiser Aluminum									
Min	Si 0.40	Fe	Cu 0.15	Mn	Mg 0.80	Cr 0.04	Zn	Ti	Al
Max	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	Rem.
OTHER ELEMENTS: 0.05 MAX EACH / 0.15 MAX TOTAL									

We hereby certify that the material has been manufactured and tested in accordance with the requirements of the applicable specifications and descriptions set forth on Precision Tube's sales acknowledgement. During the manufacturing, testing, and inspection, the product did not come into direct contact with mercury or any of its compounds, nor with any mercury containing device employing a single boundary containment. Test results indicate that the material is compliant with the current revision of the RoHS Directive (2011/65/EU).

Manufactured in the USA
QMS Registered to ISO 9001: 2008

By:
Art Onaitis
QA Manager

08/05/15

Page: 1 of 1

KAISER ALUMINUM FABRICATED PRODUCTS

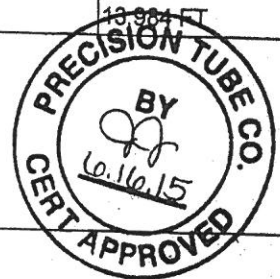
Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

CUSTOMER PO NUMBER: PT50821		CUSTOMER PART NUMBER: SPIRIT-371850		PRODUCT DESCRIPTION: 5.400 LB/PC .500 LB/-0 LB 1.312 OD X .085 WALL ESRT	
KAISER ORDER NUMBER: 318793	LINE ITEM: 001	SHIP DATE: 06/12/2015	KAISER LOT NUMBER: 50751-296	ALLOY: 6061	TEMPER: O
WEIGHT SHIPPED: 13013.000 LB	QUANTITY: 2400.000 PCS	B/L NUMBER: 004765	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 13.984 FT
SHIP TO: PRECISION TUBE CO 287 WISSAHICKON AVENUE N. WALES, PA 19454 USA			SOLD TO: MUELLER INDUSTRIES, INC PRECISION TUBE 8285 TOURNAMENT DRIVE STE. 150 MEMPHIS, TN 38125 USA		



Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS(KSI)	YTS(KSI)	%Elong in 2	HARDNESS	CONDUCT.	BEND
50751-296	0001	0001	17.9	6.2	27.5	NA N/A	N/A	N/A
50751-296	0001	0002	17.7	5.9	27.0	NA N/A	N/A	N/A
50751-296	0001	0003	17.2	6.0	27.9	NA N/A	N/A	N/A
50751-296	0001	0004	17.4	5.9	26.6	NA N/A	N/A	N/A
50751-296	0001	0005	17.6	6.1	26.6	NA N/A	N/A	N/A
50751-296	0001	0006	18.5	6.7	26.6	NA N/A	N/A	N/A
50751-296	0001	0007	17.4	6.0	26.6	NA N/A	N/A	N/A
50751-296	0001	0008	17.3	6.1	27.1	NA N/A	N/A	N/A
50751-296	0001	0009	17.5	6.9	27.7	NA N/A	N/A	N/A
50751-296	0001	0010	17.7	6.1	28.2	NA N/A	N/A	N/A
50751-296	0001	0011	17.5	6.0	27.4	NA N/A	N/A	N/A
50751-296	0001	0012	17.7	6.4	28.2	NA N/A	N/A	N/A
50751-296	0001	0013	17.0	5.3	29.8	NA N/A	N/A	N/A
50751-296	0001	0014	17.1	5.3	27.2	NA N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

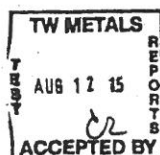
LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	.0
F39894	.60	.28	.22	.04	.98	.06	.03	.02	.00	.00	.00	.01	.02

Applicable Requirements:

ASTM-B241-12 NON-STENCILED ASTM-B221-13 ASTM-B345-11 AMS-QQ-A-200/8 97(R07) TYPE I
UNS#A96061 Also conforms to EN 10204 3.1

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY OF ITS COMPOUNDS ARE UTILITIZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.



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**KAISER
ALUMINUM
FABRICATED PRODUCTS**

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

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CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

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JOSEPH AMES, QUALITY MANAGER

Jph



C



Alcoa Forgings and Extrusions
Lafayette Operations
3131 East Main Street
Lafayette, IN
47905-7500

Alcoa, Inc.

Invoice To Customer
TW METALS INC
THE ARBORETUM SUITE 204
760 CONSTITUTION DR
EXTON, PA - 19341

Ship To Customer
TW METALS INC
235 W. TUBEWAY
CAROL STREAM, IL - 60188



Certified Inspection Report

Sales Order Number		Customer P/O		Cert Number	Page
1000546276		49336978-001 / ITEM 44328		AE1700483	1/2
Line	16.1	Date Shipped		Cert Print Date	
Quantity Shipped	461 LB	28-AUG-15		04-SEP-15	
B/L	2251081	Item No.	G03346574		
Delivery ID	10243378	Item No. Rev			
Customer Part No					
Item Description Drawn Tube OD X WALL 1750.00 X 0.065 WALL 144 IN LN 6061 / T6 W/F 0.405 Marking CONTINUOUS, Oiling NO AMS4082 REV B AMS-W-T-700/6 REV B ASTM B210 REV C CP49-7-4.2-005 REV 8 WW-T-700/6 REV F, AM2, NOT1 AS9100 REV C MMS1440 REV A					

Notes
The material for this order was melted and manufactured in USA.
COMPOSITION NOTE: The values for 'Others Each' and 'Others Total' have met the limits as shown on this certified inspection report. Remainder is Aluminum.

Legal Statement	We hereby certify that, unless otherwise indicated, the material covered by this report has been manufactured, inspected, and tested in accordance with, and has been found to meet, the applicable requirements described herein, including any specifications forming a part of the description and that samples representative of the material met the composition and had the mechanical properties shown on the face of this certification. Also, note that mercury is not a normal contaminant in aluminum alloys and neither it nor any of its compounds are used in the manufacture of our product. This certification is not to be reproduced in partial form without prior written approval of our Quality Assurance Dept.	Signature And Title Melissa Griffith Quality Control Manager 28-AUG-15

Quantities per Lot / Packages			
Package Number	Lot Number	Quantity	UOM
G17-PKG738515	22499208	19	PCS
G17-PKG742437	22269697	76	PCS
		396	

DAS
14
9-89
5/12/02

Composition Limits									
Alloy	Wt %	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6061	Min	0.40	---	0.15	---	0.8	0.04	---	---
	Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15
Others Total									
Alloy	Wt %	Others Each							
6061	Min	---							
	Max	0.05							

Composition Results									
Heat / Cast / Lot Number	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	
7665-L1	0.6	0.08	0.28	0.004	1.0	0.05	0.01	0.02	
7685-L10	0.6	0.24	0.24	0.040	1.0	0.05	0.06	0.02	

✓

Alcoa Forgings and Extrusions
Lafayette Operations
3131 East Main Street
Lafayette, IN
47905-7500

Alcoa Forgings and Extrusions
Lafayette Operations
3131 East Main Street
Lafayette, IN
47905-7500

Sales Order Number		Customer P/O	Cert Number	Page
Line	No.			
1000546276	16.1	49336978-001 / ITEM 44328	AEP1700483	2/2
				Cert Print Date
			28-AUG-15	04-SEP-15

Heat / Cast / Lot Number

Heat / Cast / Lot Number	Others Each	Others Total
7665-L1	--	--
7685-L10	--	--

Property -	Test Results
------------	--------------

		Test Type	UTS - L	TYS - L	EL 4D-Long
		UOM	KSI	KSI	PCT
# of Tests					
Test Temper	Lot Number	Piece / Test ID	Results	Results	Results
T6	22199208	1-F	47.7	42.7	22.0
T6	22269697	1-F	45.6	41.7	18.6

		Dimensional	
Test Type			
UOM			
# of Tests			
Test Temper	Lot Number	Min	Max
T6	SPEC LIMITS	P	---

Test Type		Dimensional
UOM		
# of Tests		
Test Temper	Lot Number	Results
T6	22199208	P
T6	22269697	P

TW METALS
SEP - 6 15
ACCEPTED
P.S.

Made in USA

Made in USA

The test report shall not be reproduced except in full, without the written approval of the Quality Department. No alteration, addition or other change is authorized to be made to this certificate.

The recording of false, fictitious, or otherwise fraudulent statements or entries on this certificate by any recipient may be punished as a felony under applicable law.

TV METALS
SEP - 6 15
ACCEP-ED BY



Service Center Metals

5850 Quality Way
Prince George, VA 23875

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

Can Do.

BILL TO
TW METALS-Exton, PA
SHIP TO
TW METALS-Carol Stream, IL

MANIFEST NUMBER
270899
CUSTOMER PO
M49336938
CUSTOMER PART NUMBER
45963

DATE OF SHIPMENT
9/4/2015
HSC0321
DATE OF SHIPMENT
9/4/2015

OUR ORDER NUMBER
238291
ITEM
1
CERTIFICATION
ASTM-B221-14 SPOT STENCILLED
SPECIFICATION
AMS-QQA-200/8 - 1997

Quantity Certified

1,781 lbs

164 pcs

SALESPERSON
Ellis Williams
DESCRIPTION
6061-T6
SST 1.000x1.000x.125

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA.

Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
4	201515692	8/18/15	min 45.80 max 48.70	min 43.90 max 46.80	min 11.28 max 12.90
2	201516564	9/2/15	min 48.20 max 54.50	min 46.50 max 52.00	min 11.12 max 11.40



Chemical Composition for Aluminum Alloy 6061

Cast #	Lot No.	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others	Melt Source:
2K150806B	201515692	6061	0.64	0.25	0.21	0.05	0.85	0.07	0.04	0.02	97.87	0.05	0.15
2K150827C	201516564	6061	0.61	0.25	0.19	0.03	0.85	0.06	0.03	0.02	97.97	0.05	0.15

SCM is ISO 9001-2008 certified

1. FAR BAA	<input checked="" type="checkbox"/> Complies	<input type="checkbox"/> Cannot certify compliance
2. DFARS BAA	<input checked="" type="checkbox"/> Complies	<input type="checkbox"/> Cannot certify compliance
3. FAR TAA	<input checked="" type="checkbox"/> Complies	<input type="checkbox"/> Cannot certify compliance

Print Date: 9/4/2015

Calvin J. Wiggins, Director of Quality & Technical Services

Rev 9/23/11 - UMS

CCBA



SHANGHAI CHUANGYE PRECISION SEAMLESS TUBE CO., LTD.
MILL TEST CERTIFICATE
ISO9001:2008/EN10204 3.1

M49332090 9-14-15

CUSTOMER: TW METAL
ORDER NO: M49332090
P.O. US-2325

GRADE: ASTM A213-14 / ASME SA213-13, ASTM A269-14 TP304/304L

COMMODITY: STAINLESS STEEL SEAMLESS TUBE

CONDITION: COLD FINISH / SOLUTION TREATED/PICKLED/PLAIN END/OD POLISHED 320 GRIT/ANNEALED

DATE: Aug. 05, 2015
CERTIFICATE NO.: HL20150812

HEAT NO.: 150319107

CHEMICAL COMPOSITION (%)

ELEMENTS	C	Si	Mn	P	S	Ni	Cr	Mo	Ti	Cu	N	Co
SPEC	MIN	0.035	1.00	2.00	0.045	0.030	12.0	20.0				
	MAX	0.014	0.33	1.40	0.038	0.002	8.01	18.20				
RESULT(LADLE)		0.016	0.35	1.42	0.039	0.002	8.03	18.21				
RESULTS(PRODUCT)												

PHYSICAL PROPERTIES

Dimensions			Quantity		Tensile Properties			Hardness		Flattening	Flaring	Grain Size	Hydrostatic	I.C.T A262E	EDDY CURRENT TEST (100%)
OD (INCH)	W.T (INCH)	LENGTH (FT)	PCS	KG	Y.S 0.2%	T.S	EL ≥35(%)	HRB 80max							
0.375	0.035	20	750	875	283	580	53	76	OK	OK	/	OK	OK	OK	OK
0.750	0.049	20	150	503	285	579	54	77	OK	OK	/	OK	OK	OK	OK
0.750	0.083	20	153	830	284	580	54	78	OK	OK	/	OK	OK	OK	OK
0.500	0.065	20	148	409	285	579	55	75	OK	OK	/	OK	OK	OK	OK

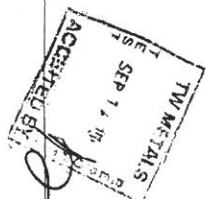
REMARKS:

AS PER ASTM A213-14/ASME SA213-13, ASTM A269-14
IN COMPLIANCE TO NACE MR0175/MR0103
SOLUTION HEAT TREATMENT: 1050°C X 1.5h/min
NO WELD REPAIR WAS PERFORMED
FREE FROM MERCURY CONTAMINATION
IC TESTING ACCORDANCE TO ASTM A262 E-SATISFACTORY
COUNTRY OF ORIGIN: CHINA
PMI TESTING DONE.
MATERIAL TEST CERTIFICATES TO EN 10204/3.1

1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT
2. THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.

MANAGER OF QUALITY ASSURANCE DEPARTMENT

James Lee





Alcoa Forgings and Extrusions
Lafayette Operations
3131 East Main Street
Lafayette, IN
47905-7500

Alcoa, Inc.

Invoice To Customer

TW METALS INC
THE ARBORETUM SUITE 204
760 CONSTITUTION DR
EXTON, PA - 19341

Ship To Customer

TW METALS INC
235 W. TUBEWAY
CAROL STREAM, IL - 60188



Certified Inspection Report

Sales Order Number		Customer P/O	Cert Number AEPI703219	Page 1/2
Line No.	Line No.			
1000542017	14.1	49339301-001 / ITEM 44129	09-OCT-15	12-OCT-15

Quantity Shipped	Date Shipped	Item No.	Item Description
654	09-OCT-15		Drawn Tube OD X WALL 1.500 OD x 0.125 WALL
B/L			144 IN LN 6061 / T6
2259265		G03346582	W/F 0.635 Marking CONTINUOUS; Oiling NO
Delivery ID	Item No. Rev		AMS4082 REV P AMS-WW-T-700/6 REV B
10329209			ASTMB210 REV 12 CP49-7.4.2-005 REV 8
Customer Part No			WW-T-700/6 REV F, AM2, NOTI AS9100 REV C MMSI440 REV A

Notes

The material for this order was melted and manufactured in USA.
COMPOSITION NOTE: The values for 'Others Each' and 'Others Total' have met the limits as shown on this certified inspection report. Remainder is Aluminum.

Legal Statement

We hereby certify that, unless otherwise indicated, the material covered by this report has been manufactured, inspected, and tested in accordance with, and has been found to meet, the applicable requirements described herein, including any specifications forming a part of the description and that samples representative of the material met the composition and had the mechanical properties shown on the face of this certification. Also, note that mercury is not a normal contaminant in aluminum alloys and neither it nor any of its compounds are used in the manufacture of our product. This certification is not to be reproduced in partial form without prior written approval of our Quality Assurance Dept.

Signature And Title

Melissa J. Griffith
Melissa Griffith
Quality Control Manager
09-OCT-15

Quantities per Lot / Packages

Package Number	Lot Number	Quantity	UOM	Weight	
				Gross	Net
G17-PKG749924	22558086	20	PCS	160	152
G17-PKG749926	22558086	33	PCS	260	251
G17-PKG749927	22558086	33	PCS	260	251

Composition Limits

Alloy	Wt %	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6061	Min	0.40	---	0.15	---	0.8	0.04	---	---
	Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15

Others Total

Alloy	Wt %	Others Each
6061	Min	---
	Max	0.05

Composition Results

Heat / Cast / Lot Number	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
7776-L7	0.6	0.22	0.26	0.04	1.0	0.06	0.05	0.02



Alcoa Forgings and Extrusions
Lafayette Operations
3131 East Main Street
Lafayette, IN
47905-7500

Certified Inspection Report

Sales Order Number		Customer P/O		Cert Number	Page
1000542017	Line No.	14.1	49339301-001 / ITEM 44129	AEP1703219	2/2
				09-OCT-15	12-OCT-15

Composition Results

Heat / Cast / Lot Number	Others Each	Others Total
7776-L7	--	--

Mechanical Property -

Test Results		Test Type		UOM		UTS - L		TYS - L		EL 4D-Long	
# of Tests		# of Tests		# of Tests		# of Tests		# of Tests		# of Tests	
Piece / Test ID		Piece / Test ID		Piece / Test ID		Piece / Test ID		Piece / Test ID		Piece / Test ID	
T6		T6		T6		T6		T6		T6	
Lot Number		Lot Number		Lot Number		Lot Number		Lot Number		Lot Number	
22558086		22558086		22558086		22558086		22558086		22558086	
I-F		I-F		I-F		I-F		I-F		I-F	
Results		Results		Results		Results		Results		Results	
45.5		45.5		45.5		45.5		41.0		23.4	

Other - Test Limits

Test Type		UOM		# of Tests		Lot Number		SPEC LIMITS	
T6		T6		T6		T6		T6	
Min		Min		Min		Min		Min	
P		P		P		P		P	

Other - Test Results

Test Type		UOM		# of Tests		Lot Number		Results	
T6		T6		T6		T6		T6	
22558086		22558086		22558086		22558086		22558086	

Cert Notes

Made in USA

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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M1606IT6
DATE: 15/12/02

PO / BATCH NO.: 30515/133700

MATERIAL CERT REC'D: yes
QUANTITY RECEIVED: 168'
QUANTITY INSPECTED: 168'
QUANTITY REJECTED: _____

THICKNESS ORDERED: 1.00X1.00X.120
THICKNESS RECEIVED: 1.00X1.00X.125
SHEET SIZE ORDERED: _____
SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y N	
CORRECT THICKNESS	<input checked="" type="radio"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
<div style="display: flex; justify-content: space-between;"> <div> INSPECTED BY: <u>DAS</u> <u>14</u> <small>9/89</small> DATE: <u>15/12/02</u> </div> <div> SIGNED OFF BY: _____ DATE: _____ </div> </div>	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304
DATE: 15/12/02

PO / BATCH NO.: 30515/133700

MATERIAL CERT REC'D: yes
QUANTITY RECEIVED: 60'
QUANTITY INSPECTED: 60'
QUANTITY REJECTED: _____

THICKNESS ORDERED: TR.750X.049W
THICKNESS RECEIVED: TR.750X.049W
SHEET SIZE ORDERED: _____
SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y	N	
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y	N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> <u>14</u> DATE: <u>15/12/02</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M606IT6
 DATE: 15/12/02

PO / BATCH NO: 30515/133700

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 48'
 QUANTITY INSPECTED: 48'
 QUANTITY REJECTED: _____

THICKNESS ORDERED: T.375 X .058 U
 THICKNESS RECEIVED: T.375 X .058 U
 SHEET SIZE ORDERED: _____
 SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y	N	
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y	N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 14</u> DATE: <u>15/12/02</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6
 DATE: 15/12/02

PO / BATCH NO.: 30515/133700

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 24'
 QUANTITY INSPECTED: 24'
 QUANTITY REJECTED: _____

THICKNESS ORDERED: T.625 X .065W
 THICKNESS RECEIVED: T.625 X .065W
 SHEET SIZE ORDERED: _____
 SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y	N	
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y	N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 14</u> DATE: <u>15/12/02</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6
DATE: 15/12/02

PO / BATCH NO.: 30515/133706

MATERIAL CERT REC'D: yes
QUANTITY RECEIVED: 108'
QUANTITY INSPECTED: 108'
QUANTITY REJECTED: _____

THICKNESS ORDERED: T1.250 X.1250
THICKNESS RECEIVED: T1.250 X.1204
SHEET SIZE ORDERED: _____
SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/>	N	
CORROSION	Y	<input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/>	N	
CORRECT MATERIAL	<input checked="" type="radio"/>	N	
CORRECT THICKNESS	<input checked="" type="radio"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/>	
CORRECT MATERIAL	<input checked="" type="radio"/>	N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/>	N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>15/12/02</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6
DATE: 15/12/02

PO / BATCH NO.: 30515/133700

MATERIAL CERT REC'D: yes
QUANTITY RECEIVED: 108'
QUANTITY INSPECTED: 108'
QUANTITY REJECTED: _____

THICKNESS ORDERED: T1.00X .065 W
THICKNESS RECEIVED: T1.00X .065 W
SHEET SIZE ORDERED: _____
SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y	N	
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y	N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>15/12/02</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6
DATE: 15/12/02

PO / BATCH NO.: 30515/133700

MATERIAL CERT REC'D: yes
QUANTITY RECEIVED: 36'
QUANTITY INSPECTED: 36'
QUANTITY REJECTED: _____

THICKNESS ORDERED: T1.500X.125W
THICKNESS RECEIVED: T1.500X.125W
SHEET SIZE ORDERED: _____
SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
CORROSION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
PHOTO REQUIRED	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
	HRC	HRB	DUR A	DUR D
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>15/12/02</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6
DATE: 15/12/02

PO / BATCH NO.: 305151 133700

MATERIAL CERT REC'D: yes
QUANTITY RECEIVED: 108'
QUANTITY INSPECTED: 108'
QUANTITY REJECTED: _____

THICKNESS ORDERED: T 1.250 X .065 W
THICKNESS RECEIVED: T 1.250 X .065 W
SHEET SIZE ORDERED: _____
SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	N	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>15/12/02</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO30515**

Purchase Order Date 11/19/2015

PO Print Date 11/19/2015

Page Number 1 of 4

Order From :

VU-TWM001

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAXED

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via: YRC COLLECT

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency USD

FOB FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	M304TR0.750W.049	304 RD Tube .750 x .049W	11/26/2015 Yes 11/26/2015		60.00 ✓ f	\$2.10	\$126.00 ✓
	MATERIAL: AISI 304/316 SA SEAMLESS ROUND TUBING AS PER ASTM A213 OR AMSE SA213 OR ASTM A269						
Line Total:							\$126.00
2	M6061T6T0.375W.058	6061-T6 RD Tube .375 x.058W	11/26/2015 Yes 11/26/2015		48.00 ✓ f	\$2.15	\$103.20 ✓
	MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR ASTM B241						
Line Total:							\$103.20

8015-11-27

Note:

11/19/2015



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PURCHASE ORDER

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Purchase Order Date 11/19/2015

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Page Number 2 of 4

Order From :

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

VU-TWM001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via:

YRC COLLECT

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

3	M6061T6T0.625W.065	6061-T6 RD Tube .625 x.065W	11/26/2015	24.00 ✓	\$3.15	\$75.60 ✓
			Yes	f		
			11/26/2015			

SAME AS ABOVE

Line Total: \$75.60

4	M6061T6T0.875W0.125	6061-T6 RD TUBE .875 X .125W	11/26/2015	12.00	\$12.50	\$150.00
			Yes	f		
			11/26/2015			

SAME AS ABOVE

Line Total: \$150.00

5	M6061T6T1.000W065	6061T6 RD TUBE 1.00 x .065w	11/26/2015	108.00 ✓	\$2.96	\$319.19 ✓
			Yes	f		
			11/26/2015			

SAME AS ABOVE

Line Total: \$319.19

SPK-11-27

Note:

11/19/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
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Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO30515**

Purchase Order Date 11/19/2015

PO Print Date 11/19/2015

Page Number 3 of 4

Order From :

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

VU-TWM001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via:

Ship Acct:

YRC COLLECT

Buyer

Customer POID

Customer Tax

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

USD

FCA - (Free Carrier)

6	M6061T6T1.250W.125	ALUM. RD TUBING 1.250 x.125W	11/26/2015	108.00	✓	\$5.24	\$566.35
			Yes	f			
	SAME AS ABOVE		11/26/2015				

Line Total:

\$566.35

7	M6061T6T1.500W.125	6061T6 RD TUBE 1.50 X .125W	11/26/2015	36.00	✓	\$6.70	\$241.20
			Yes	f			
	SAME AS ABOVE		11/26/2015				

Line Total:

\$241.20

8	M6061T6T1.750W.065	6061T6 RDTUBE 1.750 X 0.65W	11/26/2015	108.00	✓	\$6.75	\$729.00
			Yes	f			
	SAME AS ABOVE		11/26/2015				

Line Total:

\$729.00

2015-11-27

Note:

11/19/2015



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1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
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PURCHASE ORDER

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Purchase Order Date 11/19/2015

PO Print Date 11/19/2015

Page Number 4 of 4

Order From :

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

VU-TWM001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via: YRC COLLECT

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency USD

FOB FCA - (Free Carrier)

9 M6061T6TS1.000W.120

6061T6 SQ TUBE 1.00 x
1.00 X .120w

11/26/2015

168.00

\$2.00

\$336.00

Yes

11/26/2015

MATERIAL: 6061-T6/T651/T6510/T6511T62 SQUARE TUBING
PER AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR
AMS-QQ-A-200/8 OR AMS 4160

NOTE: FLAT EDGE

Line Total:

\$336.00

10 71401-45

PROCUREMENT
QUALITY CLAUSES

11/26/2015

1.00

\$0.00

\$0.00

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

No

11/26/2015

Line Total:

\$0.00

PO Total:

\$2,646.55

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr:

1

Change Date:

11/19/2015